August 2023

Risk benchmarking for the EU deforestation regulation: Key principles and recommendations

Trase and Proforest set out a framework and methodology to inform the design of the EUDR benchmarking system. These recommendations build on experience advising industry groups on commodity risk benchmarking systems to meet voluntary deforestation commitments.

Authors

Helen Bellfield, Osvaldo Pereira, Toby Gardner (Trase) and Jane Siqueira Lino (Proforest).

The authors would like to thank Chris West (Trase), Érika Monteiro, Smita Jairam Viswanath and Veronique Bovee (Proforest), Leah Samberg (Rainforest Alliance) and the Consumer Goods Forum's Forest Positive Coalition for their valuable contributions.

Key messages

1. Risk benchmarking has a crucial role in the successful implementation of the EU deforestation regulation by targeting checks on commodities produced in high-risk regions and enabling simplified due diligence on those from low-risk regions.

2. While subnational benchmarking should be prioritised for countries identified as high risk, it is relevant for any country with high variation in deforestation rates between subnational regions and should be considered in such cases for standard risk countries.

3. Risk benchmarking should be done on a commodity-specific basis where sufficient data is available, as different commodities can have different risk profiles in the same country.

4. Classifying risk based on the relative amount of commodity deforestation in a country or subnational region compared to the total amount globally or in a country provides an objective and comparable benchmark that can be used consistently across commodities and scales.

5. The application of simplified due diligence for low-risk regions merits a very conservative definition of low risk.

6. Industry groups are already using risk benchmarking to implement voluntary deforestation commitments. Their experience provides useful lessons for the EUDR benchmarking system.

7. Engagement with producer governments and local stakeholders on the design of the benchmarking system will be critical in building trust and ensuring that it is accurate and uses appropriate data.

Contents

Executive summary

The EU deforestation regulation (EUDR) aims to prevent commodities associated with deforestation entering the EU market. Under this regulation, the European Commission will establish a three-tier benchmarking system to classify commodity-producing countries and parts thereof as low, standard or high risk (Article 29). When the EUDR entered into force on 29 June 2023, all countries were classified as standard risk. No more than 18 months later, the Commission will classify countries and parts thereof as low or high risk and publish this list. The system will enable regulators to target checks on products from high-risk countries, and operators to undertake simplified due diligence for products from low-risk countries.

This policy briefing by Trase and Proforest sets out a framework and methodology to inform the design of the EUDR benchmarking system. These recommendations build on experience advising industry groups on commodity risk benchmarking systems to meet voluntary deforestation commitments. This is presented in two case studies: the first, classifying deforestation and ecosystem conversion risk for beef at national level; and the second, for soy at subnational level in Brazil. Finally, this policy briefing sets out key lessons and recommendations for use of the framework and methodology in different EUDR implementation contexts.

To be effective in supporting EUDR, a key recommendation is to apply risk benchmarking not only for total deforestation, but per commodity at both national and subnational levels. For those sectors and countries where sufficient data is available, subnational risk benchmarking can be conducted to effectively designate low-risk regions to determine deforestation-free supply and simplified due diligence, while prioritising more rigorous due diligence in production regions where deforestation is concentrated. Similarly, risk benchmarking classifications should be on a per-commodity basis where sufficient data is available, meaning that any one country or region may have different risk classifications for different commodities.

To be applied fairly and consistently across and within countries and commodities, risk benchmarking needs to be based on an objective and comparable framework. This is best achieved by classifying risk based on the relative amount of commodity deforestation in a country or subnational region compared to the total amount globally or in a country.

Risk benchmarking focused on deforestation cannot provide assurance against non-compliance with the EUDR legality requirements such as land use rights, as regions that are low risk for deforestation could be high risk for illegal production and human rights infringements. It is important to integrate data on legal compliance and human rights into the EUDR benchmarking system.

Investment is needed to provide better quality and publicly available official data on commodity deforestation. Gaps in commodity crop and pasture maps lead to a reliance on cruder data such as non-commodity specific deforestation information, national-scale data or land-balance models[1] to assign deforestation impacts to specific commodities. The integration of multiple datasets allows for a credible and robust benchmarking system using existing data, but it remains important that investments in data are made to reduce uncertainties and more effectively target due diligence and enforcement efforts.

Engagement and consultation with producer governments and local stakeholders on risk benchmarking will be critical in building trust in the system. High-risk regions should be the focus of EU partnership strategies to address underlying drivers of deforestation and ecosystem conversion, and especially to provide support for smallholders to transition to sustainable production. Subnational risk benchmarking can more effectively target such support to where it is most needed.

1. In land-balance models, forest loss is attributed across expanding cropland, pasture and managed forest plantations based on their area increase, but capped at total estimated forest loss in the focal region.

Introduction

On 16 May 2023, the European Union adopted the deforestation regulation (EUDR) which aims to minimise the risk of commodities and products associated with deforestation being placed on the EU market or exported. The EUDR includes a country benchmarking system to assess the risk of non-compliance with the regulation's deforestation-free requirement and classify countries of production as low, standard or high risk (Article 29). When the EUDR entered into force on 29 June 2023, all countries were classified as standard risk. No more than 18 months later, the Commission will classify countries and parts thereof as low or high risk and publish this list.

The objective of this risk classification is to help competent authorities monitor and enforce compliance by targeting checks on products from high-risk countries and to make it easier for operators to exercise due diligence on products from low-risk countries. It is also intended to act as an incentive for producer countries to reduce deforestation impacts of agricultural commodity production. The design and implementation of the benchmarking system, including consultation with producer countries, will take place over the next 18 months.

The country benchmarking system not only allows for risk assessment at country level, but also of parts thereof. The inclusion of such subnational regions in the benchmarking system is critically important for at least three interrelated reasons:

1. Deforestation and ecosystem conversion can vary more within countries than between them, undermining the practical utility of any system that only designates risk at the level of countries.
2. Even in high-risk countries, the majority of production for any given commodity can be reliably classified as low risk, meaning that a subnational risk assessment is

needed to confidently target resources for assessing compliance towards products from high-risk regions.
3. Deforestation and ecosystem conversion can only ultimately be reduced by strengthening territorial governance in the places where it is concentrated. Subnational risk assessment can be used to target incentives, interventions and resources to higher risk areas that require urgent action.

The EUDR specifies that the classification will primarily be based on risk assessment against three sets of criteria: (a) rate of deforestation and forest degradation[2]; (b) rate of expansion of agricultural land for relevant commodities; and (c) production trends of relevant commodities and relevant products. It also specifies that the risk assessment needs to be transparent and objective, using scientific evidence and internationally recognised sources.

Risk benchmarking of sourcing regions is being developed by industry groups to aid implementation of voluntary deforestation commitments. One important application is to classify sourcing regions as negligible risk and non-negligible risk (at risk) to enable companies that can trace volumes to negligible risk sourcing regions to claim deforestation and conversion-free (DCF) volumes from these regions without plot-level traceability. Examples include the Consumer Goods Forum's Forest Positive Coalition (FPC) frameworks for Deforestation and Conversion Free Soy and Beef and the Palm Oil Collaboration Group (POCG) for supply from independent smallholders in Indonesia and Malaysia.

A second application is using benchmarking to prioritise high-risk sourcing regions for individual and collective action by companies to support the transition to deforestation and ecosystem conversion-free production. Examples include the Soft Commodities Forum's (SCF) identification of priority municipalities for action and reporting on DCF soy in the Cerrado, POCG's prioritisation of action to support independent smallholders outside of concessions under the subgroup on Production and Protection Beyond Concessions (PPBC), and FPC's prioritisation of landscapes for engagement and investment.

This policy briefing builds on recent work by Trase and Proforest, with input from the Accountability Framework initiative (AFi) secretariat and in partnership with the FPC, to develop a commodity-neutral[3] and globally applicable framework and set of methodologies[4] to classify the deforestation and ecosystem conversion risk exposure of sourcing regions for cattle at country level and soy at subnational level in Brazil. Based on this experience it sets out key considerations and recommendations that the European Commision should take into account when designing the benchmarking system for the EUDR.

2. In the EUDR, forest degradation applies only to wood products.

3. The methodological framework can be applied to any forest risk commodity.

4. Benchmarking commodity production regions for risks of deforestation and conversion, available at https://resources.trase.earth/ documents/data_methods/ Benchmarking-commodity-production-regions-for-risks-of-deforestation-and-conversion.pdf

Assessing the core requirements of risk benchmarking systems

The specific objective of a risk benchmarking system determines its requirements, which in turn has implications for its design, methods and data. For the EUDR, these requirements are to be applicable across all countries and multiple commodities, and to enable both country level and subnational risk benchmarking. Table 1 highlights the likely requirements for risk benchmarking systems in the context of deforestation and ecosystem conversion-free supply chains, and the potential implications for the associated methods and data.

5. The EUDR includes a review to extend the scope of the regulation to include other wooded lands in 2024 and reviews to extend the scope to other natural ecosystems and to amend or extend the list of relevant products in 2025 (Article 34).

Table 1 Summary of how requirements for a benchmarking system influence the methods and data.

Type of requirement	Possible implications for methods and data
Consistency across the relevant scope of commodities, ecosystems and geographies.	Methods need to be applied with reasonable consistency across different commodities and regions, across both country and subnational scales, and be able to adapt to different levels of data availability. At the same time, methods need to recognize that data requirements will vary between commodities, countries and subnational regions.
Accommodate future changes in scope	Methods need to be able to accommodate potential changes to the scope of the system to include new commodities and ecosystems[5].
Risk assessment criteria	The purpose of benchmarking will determine the scale of analysis (e.g. country or tier of subnational administrative unit) and the specific risk assessment criteria (e.g. commodity specific deforestation or smallholder share of production/deforestation).
Integration of new data sources	Methods need to be responsive and able to integrate new data as it emerges, including both qualitative and quantitative data.
Responsiveness and update frequency	Methods need to be readily repeatable and responsive to changes in the risk profiles of commodities, countries and subnational regions and enable regular updates.
Objectivity, credibility & transparency	To ensure that a risk benchmarking system is objective, the discrimination of high and low–risk regions and countries needs to be assessed relative to the overall scale of the problem. Data sources should prioritise publicly available and official government data where possible. Methods and data sources must be transparently communicated.

A practical approach to risk benchmarking: Recommendations from existing methods

Trase and Proforest, with input from the AFi secretariat, developed a general approach to risk benchmarking to support the FPC to assess deforestation and ecosystem conversion risks for cattle globally at the country level and for soy in Brazil at the subnational level. While these methods were developed for different applications than the EUDR and respond to related but different requirements, they provide relevant lessons for the development of the EUDR benchmarking system.

Although the national and subnational methods were developed separately, they share a set of common principles and a methodological framework which is set out below alongside brief case studies for their applications for the FPC. These principles and framework provide a robust approach for risk benchmarking that enable the integration of new datasets and future adjustments as they are put into practice.

Principles for risk benchmarking

The following general principles can help ensure both the credibility and legitimacy of a risk benchmarking system that can be applied across commodities and regions:

1. **Deforestation and ecosystem conversion should be assessed based on a relative approach** that classifies risk levels based on the amount of commodity deforestation and ecosystem conversion in that country or subnational region relative to the total deforestation and ecosystem conversion for that commodity globally or in the country. This ensures that the risk level is consistently benchmarked against the total level of a commodity's deforestation and ecosystem conversion impact. One alternative to a relative approach would be to determine levels of greatest concern based on an absolute threshold of deforestation and ecosystem conversion; for example, areas with more than a specific number of hectares of deforestation and ecosystem conversion. However, as both the size of producing regions and the scale of deforestation and ecosystem conversion across and within countries and between commodities varies so much, this would not allow for a comparative approach. Other potential relative measures include benchmarking commodity deforestation and ecosystem conversion against the total production or total remaining forests or ecosystems in a country or subnational region. However, these metrics would de-prioritise the risk level in consolidated regions with higher production and in regions with more remaining ecosystems respectively.

2. **The link between deforestation and ecosystem and commodity production needs to be assessed across multiple years** to accommodate time lags between deforestation and ecosystem conversion of an area of land and its use to produce a specific commodity.

3. **Designation of low-risk regions is needed to provide area-based assurances for meeting sustainable sourcing criteria**, thus removing the requirements for plot-level traceability of sourced commodities in these regions. Here, importantly, low risk needs to be interpreted as close to zero risk as possible to avoid areas with non-negligible rates of deforestation and ecosystem conversion being classified as low risk.

4. **Designation of high-risk regions is needed to ensure that targeted supply chain interventions help reduce overall deforestation and ecosystem conversion.** This requires that high-risk regions encompass the majority of commodity deforestation and ecosystem conversion in a given country, or if across countries, the majority of deforestation and ecosystem conversion for that commodity globally.

5. **Integration of safeguards and/or risk mitigation measures into risk benchmarking** that enable classifications to be adjusted to ensure that:
    a) Cross-commodity leakage and data gaps are accounted for. Cross-commodity leakage is a key driver of deforestation and ecosystem conversion, meaning that in regions where multiple commodities drive land-use change or risks are interrelated (as with soy and cattle in Brazil), risk assessments need to consider both commodity-specific deforestation and ecosystem conversion as well as total deforestation and total ecosystem conversion;
    b) Risk mitigation actions are captured. Risk mitigation actions such as credible national traceability systems, strong land-tenure governance and evidence of enforcement can reduce risks.

Methodological framework

Building on these principles, the following framework sets out a simple approach to risk benchmarking that can be applied across different scales and commodities. The case studies demonstrate how these steps were applied in practice.

1. **Map recent commodity deforestation and ecosystem conversion**[6] in each sourcing area (country or subnational region) over a defined time period.

2. **Benchmark commodity deforestation and ecosystem conversion** in each sourcing area relative to the total commodity deforestation and ecosystem conversion. Subnational regions are benchmarked against the country total and countries are benchmarked against the global total.

6. Commodity deforestation and ecosystem conversion is defined as the area used to produce a commodity that has been recently deforested or converted.

3. **Rank sourcing areas by the amount of recent commodity deforestation and ecosystem conversion**, from highest to lowest on the proportion each sourcing area contributes to the total country commodity deforestation and ecosystem conversion.

4. **Select thresholds to classify sourcing areas into the relevant risk classes**. The threshold which is adopted will depend on the specific practical application. For example, a threshold to apply a risk classification to a sourcing area that would enable buyers to claim deforestation and ecosystem conversion-free sourcing without further verification would need to provide assurance that there is no or negligible recent deforestation in these areas. The selection of appropriate thresholds can be supported by sensitivity analysis to understand the implications of choosing different thresholds; for example, assessing the number of individual large deforestation and ecosystem conversion events that have occurred in sourcing regions classified as low risk under different thresholds.

5. **Apply thresholds to classify sourcing areas** by ranking sourcing areas according to their relative contribution to total commodity deforestation and ecosystem conversion. Low-risk regions can be defined by starting at the sourcing area with the lowest amount of commodity deforestation and ecosystem conversion, and moving up the ranking to include all sourcing areas until, cumulatively, the threshold is reached. Where low risk is defined as no or close to no recent commodity deforestation and ecosystem conversion (as discussed above), a threshold to define low-risk regions could include all sourcing areas that cumulatively make up less than 1% of the total commodity deforestation and ecosystem conversion. High-risk regions can be defined by starting at the sourcing area with the highest amount of commodity deforestation and ecosystem conversion, and moving down the ranking to include all sourcing areas until, cumulatively, the threshold is reached.

6. **Integrate safeguards and risk-mitigation actions** and adjust classifications as appropriate. Safeguards need to address cross-commodity leakage where this is a relevant issue by considering total deforestation and ecosystem conversion for agricultural use as well as commodity-specific deforestation. Such safeguards can also address data gaps on commodity conversion of ecosystems outside of forests. Risk mitigation actions that are expected to reduce the risk level could include the existence of relevant sectoral agreements (such as the Amazon Soy Moratorium) or relevant laws with evidence of effective enforcement that reduces the risks of future commodity deforestation and ecosystem conversion.

Sensitivity analysis for setting thresholds

Sensitivity analysis is critical to test and evaluate the implications of selecting different risk thresholds. For example, in setting risk thresholds to classify regions as low risk, it is crucial to evaluate the impact of different risk thresholds on the amount of recent commodity deforestation and ecosystem conversion within regions categorised as low risk. In this case, relevant parameters to consider in sensitivity analysis include the area of commodity deforestation and ecosystem conversion, the number of isolated deforestation and ecosystem conversion events, and the number of regions with at least one isolated deforestation and ecosystem conversion event for regions classified as low risk under different possible thresholds. Isolated deforestation and ecosystem conversion events are particularly important in regions where there are limited fragments of remaining forests or natural ecosystems, and where such events can have a more significant impact on high-carbon stocks and high-biodiversity value.

Other relevant parameters that are important in understanding the efficacy and feasibility of different thresholds, depending on their application, include the number of regions, the area, and proportion of total production that would be included in different risk classifications. For example, if benchmarking is being used to prioritise regions for a monitoring system, the number of regions and the total area being monitored are important considerations in terms of the feasibility and costs of enforcement.

Case studies

Recognising the disproportionate distribution of deforestation and ecosystem conversion risks among and within countries, particularly in the soy and cattle sectors, the FPC adopted a risk-based approach for the implementation of their Soy and Beef Roadmaps. This approach classifies the origins of commodities, at country or subnational level, based on their contribution to total deforestation and ecosystem conversion.

Under this approach, countries or subnational jurisdictions that together make a very low contribution to commodity deforestation and ecosystem conversion are classified as 'negligible risk' origins, and member companies that can trace soy and beef volumes to these sourcing areas are allowed to make deforestation and conversion-free (DCF) claims without further traceability.[7] All other regions are classified as 'at risk' and more traceability is needed to allow any DCF claims related to volumes sourced. Member companies are also expected to support DCF transition in producing landscapes[8] and should prioritise higher risk origins for engagement, combining information on production base, impact opportunities and other enabling factors.

Trase and Proforest, with input from the AFi secretariat, has supported the FPC with methods and recommendations for risk classification of origins, which informed sector discussions to agree risk thresholds. The results presented in the case studies below are

adjusted to align with Trase principles for data sources and reflect the recommendations on risk thresholds made by Trase and Proforest. FPC considered these recommendations and analysed the impact and feasibility of different threshold scenarios to decide on a negligible risk approach. While these industry approaches have been developed in order to meet objectives that are different to those of the EUDR, they are related and therefore provide relevant insights to inform the development of regulatory approaches, including the EUDR benchmarking system.

Case study 1: National risk benchmarking of cattle deforestation

Objective: This risk benchmarking methodology is designed to rank and classify countries globally into 'negligible risk' and 'at risk' for cattle pasture deforestation and ecosystem conversion.

Data challenges: There are significant gaps in the availability of spatially explicit global crop and pasture maps (Pendrill et al 2022). Many datasets with global coverage rely on simple land-balance models where deforestation linked to a specific commodity is estimated based on the total expansion of that commodity in a specific area, linked to total deforestation in that area, without information on exactly how much forest was replaced by the expanding commodity. Similarly, many datasets on commodity deforestation are limited to tropical deforestation and do not cover the conversion of other natural ecosystems. To overcome these challenges, we used a combination of different datasets to consider all cattle producing countries exposed to deforestation and ecosystem conversion. The methods are responsive and can be easily adjusted to integrate new data as it emerges.

Method:
Step 1: Map recent commodity deforestation and ecosystem conversion in each country:
- Cattle deforestation from 2014–2018 using Pendrill et al. 2022 for tropical and subtropical regions;
- Cattle deforestation from 2011–2015 using Global Forest Watch (GFW) (2015);
- Production that includes all products derived from cattle and buffalo (cattle meat products and leather) from 2014–2018 using FAO (2018);
- Ecosystem conversion 2014–2019 using the conversion from all natural vegetation formations to croplands and cultivated pasture (OECD, 2018).

Step 2: Benchmark countries by calculating their proportion of cattle deforestation against total global cattle deforestation. Given the gaps in data noted above, this is done separately with both the Pendrill dataset and the GFW dataset. Countries with no cattle production are excluded.

Step 3: Rank countries by their contribution to the global cattle deforestation, from highest to lowest. Two rankings are produced using the Pendrill and GFW datasets.

Step 4 & 5: Select and apply thresholds to classify countries: This is completed for both rankings. Where countries are classified differently in the Pendrill and GFW rankings, the highest risk classification is selected, in this case at risk. The recommended threshold for the FPC beef members is 99%. In applying this recommended threshold, at-risk countries are identified by starting with the country with the highest contribution to global cattle deforestation and moving down the ranking to include all countries that cumulatively make up 99% of the global total cattle deforestation. Negligible risk countries are classified as those in the remaining lowest 1% of cumulative cattle deforestation.

Step 6: Integrate safeguards into the risk classification: countries' risk classifications are adjusted from negligible risk to at risk based on the following additional safeguards:

> **a) Cattle deforestation intensity:** The country's cattle deforestation intensity (cattle pasture deforestation divided by cattle production). It was recommended that the classification of any negligible country that is in the top quartile (25%) of countries globally is adjusted to at risk.

> **b) Conversion risk:** The country's ecosystem conversion for agricultural use relative to global ecosystem conversion for agricultural use (OECD)and cattle production relative to global cattle production (FAO). This is based on benchmarking and ranking countries from highest to lowest and applying a threshold. This safeguard reflects potential gaps in the Pendrill and GFW datasets in accurately assessing cattle deforestation. It was recommended that the classification of a country that is both ranked within the top countries that cumulatively account for 75% for ecosystem conversion to agricultural use and cattle production is adjusted to at risk.
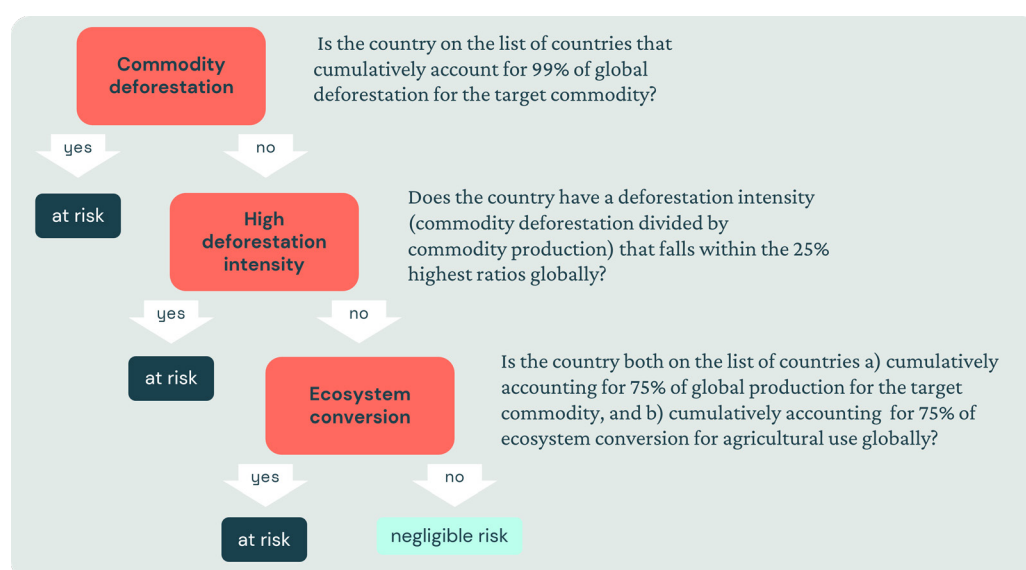

Figure 1. Applying recommended thresholds and safeguards to classify countries as negligible risk or at risk for deforestation related to cattle production.

Results: The results using the thresholds recommended are shown in Figure 2. Out of the 160 countries with cattle production according to FAO data, 67 countries are identified as at risk. Among these countries, 85% (57 countries) are classified as at risk from applying the 99% threshold for cattle deforestation. The other 10 countries are classified as at risk due to the application of safeguards; 8 due to their high deforestation intensity and 2 due to high rates of ecosystem conversion.
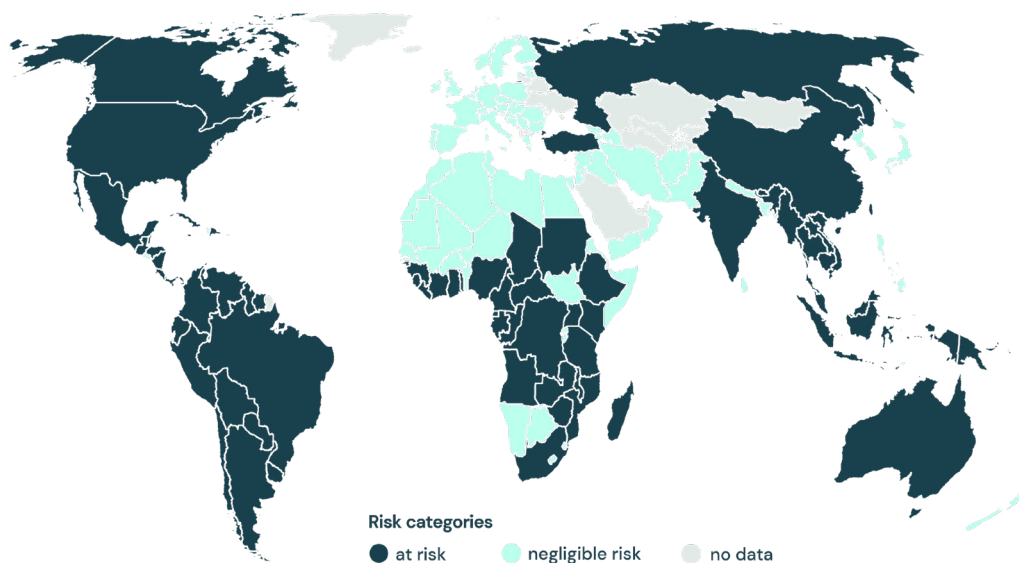
9. MapBiomas is a Brazilian initiative that produces a comprehensive annual land use and land cover map of Brazil using remote sensing and geoprocessing of landsat images. https://mapbiomas. org/.

10. While data from Mapbiomas was used to perform this step for FPC, data presented in this policy brief replaced Mapbiomas data on deforestation and ecosystem conversion by Prodes data for the Amazon and Cerrado biomes in order to align with Trase data on soy conversion that uses official data where possible.

Figure 2. Recommended risk categorisation of countries globally considering cattle deforestation exposure and safeguards.

Case study 2: Subnational risk benchmarking of soy conversion for Brazil

Objective: To classify soy producing municipalities in Brazil as negligible risk or at risk of ecosystem conversion from soy expansion.

Data challenges: In this specific context, the data is excellent. Maps of land cover and land use from Mapbiomas[9] are publicly available and widely used. They cover all biomes in Brazil, have a high spatial resolution, a long time-series and are regularly updated.

Method:

Step 1: Map recent soy conversion in each municipality using maps of soy planted in 2020 overlaid with recent conversion of native vegetation in preceding years (2014–2019) to estimate direct soy conversion in soy producing municipalities.[10]

Step 2 & 3: Benchmark and rank sourcing areas by the amount of recent soy conversion, from highest to lowest, including the proportion each municipality contributes to Brazil's total soy conversion.

Step 4 & 5: Select and apply thresholds to classify sourcing areas relative to the total amount of conversion that has occurred in Brazil. The threshold to classify

municipalities for negligible risk municipalities is applied to the ranking starting from the bottom. To inform the recommendation of the threshold for municipalities with negligible risk, we tested how the number of isolated conversion events for soy in municipalities defined as negligible risk and the number of municipalities defined as negligible risk with at least one isolated conversion event changed under a range of different possible thresholds (1–10%). This analysis demonstrated that above the 1% threshold there was a much higher proportional increase in the number of isolated soy conversion events (from 2,697 to 4,602 and to 5,472 between a 1%, 5% and 10% threshold respectively) than the increase in the number of negligible risk municipalities with at least one soy conversion event (from 594 to 800 and to 882 between a 1%, 5% and 10% threshold respectively). This suggests that a minimum threshold of 1% is required to minimise the risk that soy volumes sourced from municipalities classified as negligible risk are associated with conversion (Figure 3).

Step 6: In this methodology, no additional safeguards or risk mitigation measures were integrated into the risk assessment as any indirect land-use change impacts from soy (namely pasture expansion into forests) was beyond the scope of the example application.
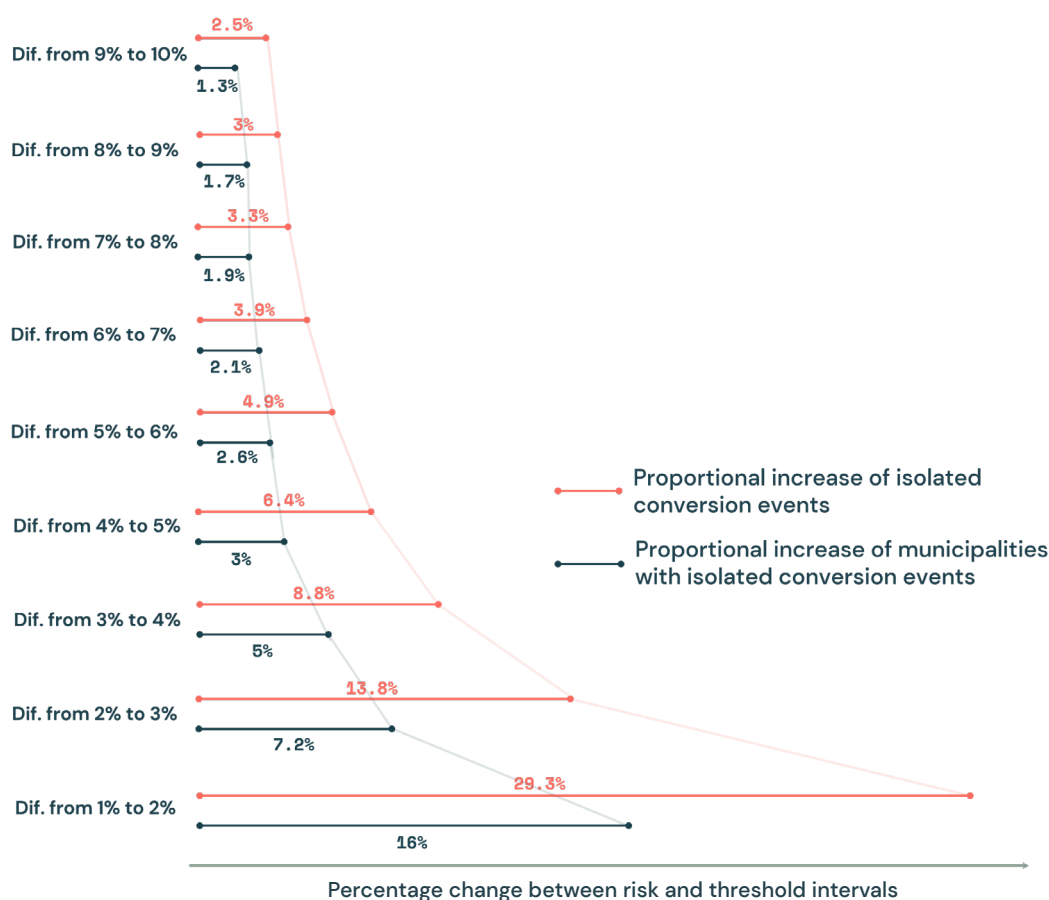

Figure 3. Relationship between the increase in negligible risk threshold (1% to 10%) and the percentage change in the number of individual conversion events and number of municipalities classified as negligible risk with at least one isolated soy conversion event for soy producing municipalities in Brazil.

Results: Figure 4 shows the results from categorising soy-producing municipalities in Brazil using a negligible conversion risk threshold of 1%, as recommended. Using this threshold, 35% (886) of Brazil's 2,485 soy producing municipalities would be classified as negligible risk. This accounts for 33% of Brazil's soy production. Municipalities categorised as negligible risk account for 3,000 hectares of soy conversion in comparison to 305,944 hectares of soy conversion in municipalities classified as at risk. 92% of soy produced in the Amazon and 87% of soy in the Cerrado is grown in at-risk municipalities.
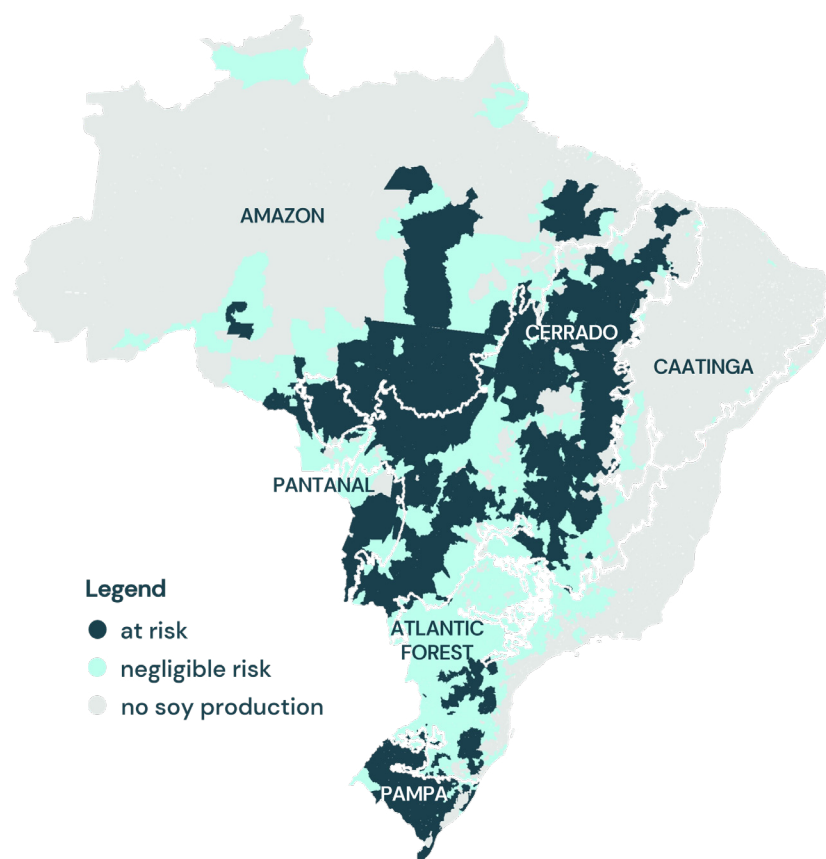

Figure 4. Soy conversion risk categories for soy producing municipalities in Brazil in 2020.

Key lessons and recommendations for the EUDR benchmarking system

1. **Risk benchmarking, including subnational benchmarking, can support EUDR implementation.** As illustrated in the case studies, commodity deforestation and ecosystem conversion is often concentrated in a few countries and subnational regions. This highlights the value of the risk benchmarking system in increasing the practicality of the EUDR implementation as envisioned in the regulation, both by targeting checks by enforcement agencies on commodities produced in high-risk regions and enabling simplified due diligence by operators for commodities produced in low-risk regions. While subnational benchmarking should be prioritised for countries identified as high risk, it is relevant for any country with

high variation in deforestation rates between subnational regions and should be considered in such cases for standard risk countries. The published tender for the development of the benchmarking system currently suggests that subnational benchmarking will only be done for high-risk countries and will only enable subnational regions to be classified as high or standard risk due to the potential loophole from simplified due diligence requirements. This should be reconsidered given that such risks of a loophole can be managed (operators are still required to collect geolocation of sourcing plots and to assess the complexity and risk of circumvention or mixing with products of origin from unknown or high/standard risk regions) and given the benefits of being able to target resources more efficiently thereby increasing the operationalisation of the regulation. While there are clearly political challenges in labelling countries or subnational regions as high risk and data challenges in implementing subnational and commodity-specific risk benchmarking, not utilising the benchmarking system to its full potential will reduce the effectiveness of the regulation's enforcement and increase costs for operators.

2.   **Risk benchmarking should be done on a commodity-specific basis where sufficient data is available** as different commodities can have different risk profiles in the same country. This requires incorporating a commodity-specific deforestation risk criteria (that goes beyond the existing risk criteria on deforestation, expansion and production trends in the regulation) where data is available. In assessing commodity-specific deforestation risks, information on deforestation and
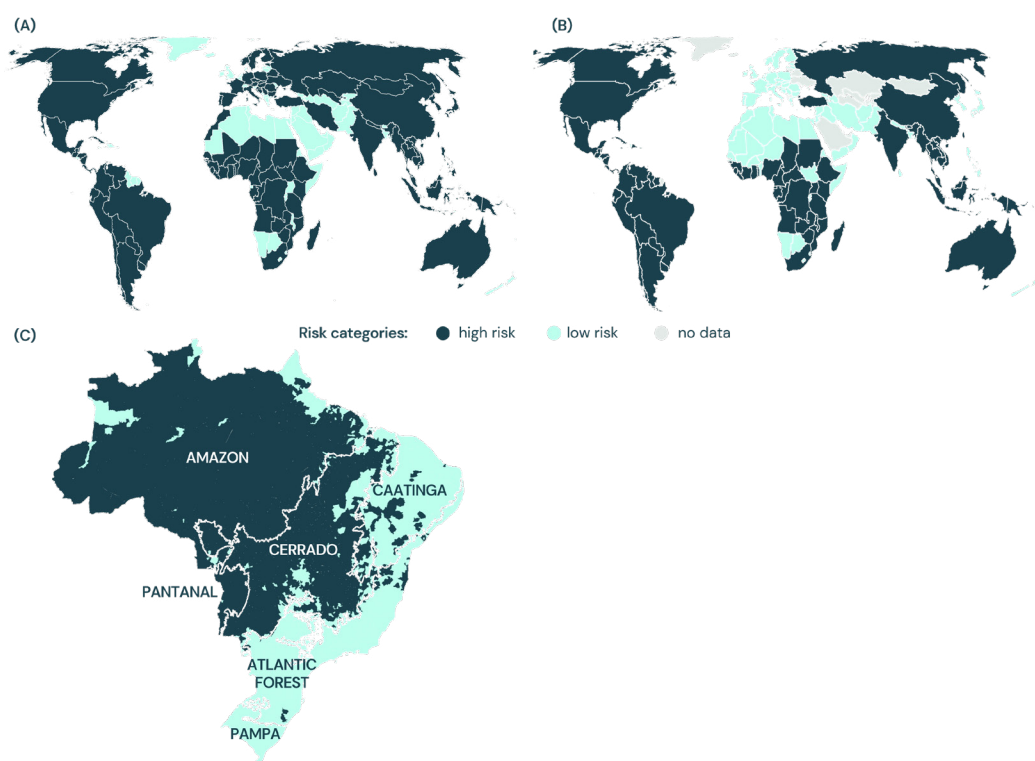

Figure 5. Illustration of how the risk benchmarking system for the EUDR could include risk benchmarking countries based on (A) total deforestation for agricultural use, (B) commodity–specific deforestation where data is available, and (C) subnational scale for either total or commodity–specific deforestation.

production trends provides important complementary information on the risk of cross-commodity leakage; for example, where there are areas of high commodity production, high deforestation overall, but low commodity deforestation, which should be taken into account in the commodity-specific risk assessment. Where data is not available, a non-commodity-specific deforestation risk assessment would be used. The published tender for the development of the benchmarking system does not include the option for commodity-specific country risk classifications. As discussed above, this should be reconsidered.

3. **Classifying risk based on the relative amount of commodity deforestation in a country or subnational region, compared to the total amount globally or in a country, provides an objective and comparable benchmark that can be used consistently across commodities and scales.** This approach has the advantage over an absolute threshold (such as areas more than a certain number of hectares of deforestation) of enabling a standardised approach that overcomes the challenges of the different sizes of countries and different scales of production and deforestation between commodities that would require bespoke thresholds.

4. **The application of simplified due diligence for low-risk regions merits a very conservative definition of low risk.** The use of a low-risk classification to allow simplified due diligence requirements in the context of the deforestation-free criteria suggests that low risk should be interpreted as negligible risk. Sensitivity analysis can be used to understand the implications of a chosen threshold used to define low-risk countries or subnational regions in terms of the residual risk of non-compliance with deforestation-free criteria.

5. **The risk of non-compliance of production countries and parts thereof with thedeforestation-free criteria may not align with the risk of non-compliance with the legality criteria.** The current approach to risk benchmarking in the regulation is limited to the deforestation-free criteria and is primarily based on rates of deforestation and agricultural expansion, although the risk assessment may take into account the following criteria that are more relevant to the legality criteria: "the existence, compliance with, or effective enforcement of laws protecting human rights, the rights of indigenous peoples, local communities and other customary tenure rights holders" and "whether the country concerned has national or subnational laws in place [...] and takes effective enforcement measures to tackle deforestation and forest degradation." This approach could mean that regions of low risk in terms of deforestation-free non-compliance are actually high risk for non-compliance with legal production, including protecting human rights. It is therefore important to integrate data on legal compliance and human rights into the risk benchmarking system. This could be achieved through integrating such information as safeguards as set out in the methodological framework presented in this policy brief.

6. **Data gaps require investments, but can be accommodated within benchmarking systems.** Key data gaps include up to date and globally consistent datasets on commodity deforestation, with gaps in commodity crop and pasture maps leading to global datasets relying on more crude land-balance models to assign deforestation impacts to specific commodities. There is also a clear need for a global basemap of forests that aligns with the EUDR definition at the cut-off date. Subnational risk benchmarking requires more granular data that in many cases will require access to country or region-specific information. The case study on global cattle deforestation risk benchmarking demonstrates that it is possible to overcome data gaps by integrating different datasets and integrating safeguards, but this also increases complexity of integrating datasets with different time series, methods and scopes. Improvements to the data landscape as a whole are therefore a critical priority.

7. **Partnerships:** Engagement and consultation with producer governments and local civil society/wider stakeholders on the design of the benchmarking system will be critical in building trust in the system and ensuring that risk benchmarks are accurate and utilise the most appropriate data, including data from third parties. Similarly, any identified high-risk regions should be the focus of EU partnership strategies and support to address underlying drivers of deforestation including multi-stakeholder participatory processes around governance reforms, support for compliance with a focus on smallholders, and incentives for the transition to more sustainable production. This will be important in mitigating the risk that the regulation leads to a bifurcated market, as operators shift sourcing away from high-risk regions, and the exclusion of smallholders due to the costs and barriers of compliance with traceability requirements.